

# PRECISION BULK METAL<sup>®</sup> FOIL TECHNOLOGY

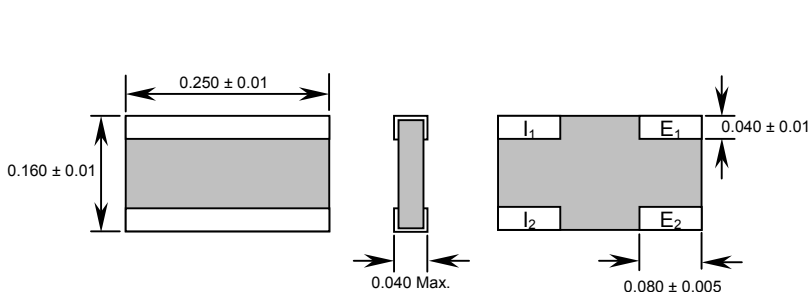
## TCS1625Z

Very Low TCR Surface Mount  
Current Sensing Resistor

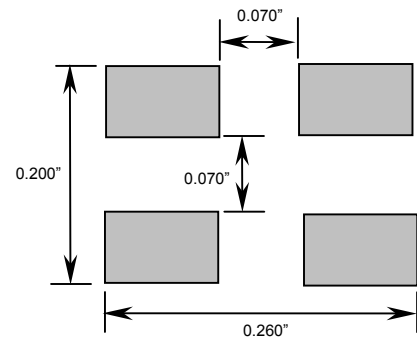
### FEATURES

- Typical Temperature Coefficient of Resistance: 0.2 ppm/°C ± 2.8 ppm/°C. (-55 °C to 125 °C, 25 °C as reference).
- Electrostatic discharge (ESD) above 25000 V.
- Power Rating: 1 W @ +70 °C; derated linearly to 0 W @ 150 °C (on alumina).
- ΔR due to self heating: 5ppm at rated power.
- Voltage coefficient: < 0.1ppm/V.
- Short time overload <0.005%
- Load life stability: ± 200 ppm/°C Max ΔR (2000 hrs. at rated power).
- Resistance range 0.3 Ω to 10 Ω.
- Resistance Tolerances available: ±0.005% to 1.0% depending upon resistor value (see table below).
- Current Noise: < -40dB
- Current rating : 1.8 A maximum
- Rise Time: 1.0 Nanosecond, no ringing

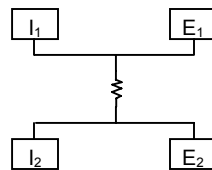
Model	Value Range (Ω)	Max Current	Power Rating ( Watts)	TCR (ppm /°C)	Tolerances Available (%)
TCS1625Z	>2.0 Ω to 10 Ω	1.8 Amps.	On alumina: 1.0 On FR4 : 0.5 @ 70 °C Linearly derating to 0 Watts @ 150 °C	± 0.2 ± 2.8	± 0.2 , ± 0.5, ± 1.0
	0.3 Ω to 2.0 Ω				± 0.5, ± 1.0



DIMENSIONS IN INCHES



SOLDER PAD LAYOUT



ELECTRICAL SCHEMATIC

Rev 09/09

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